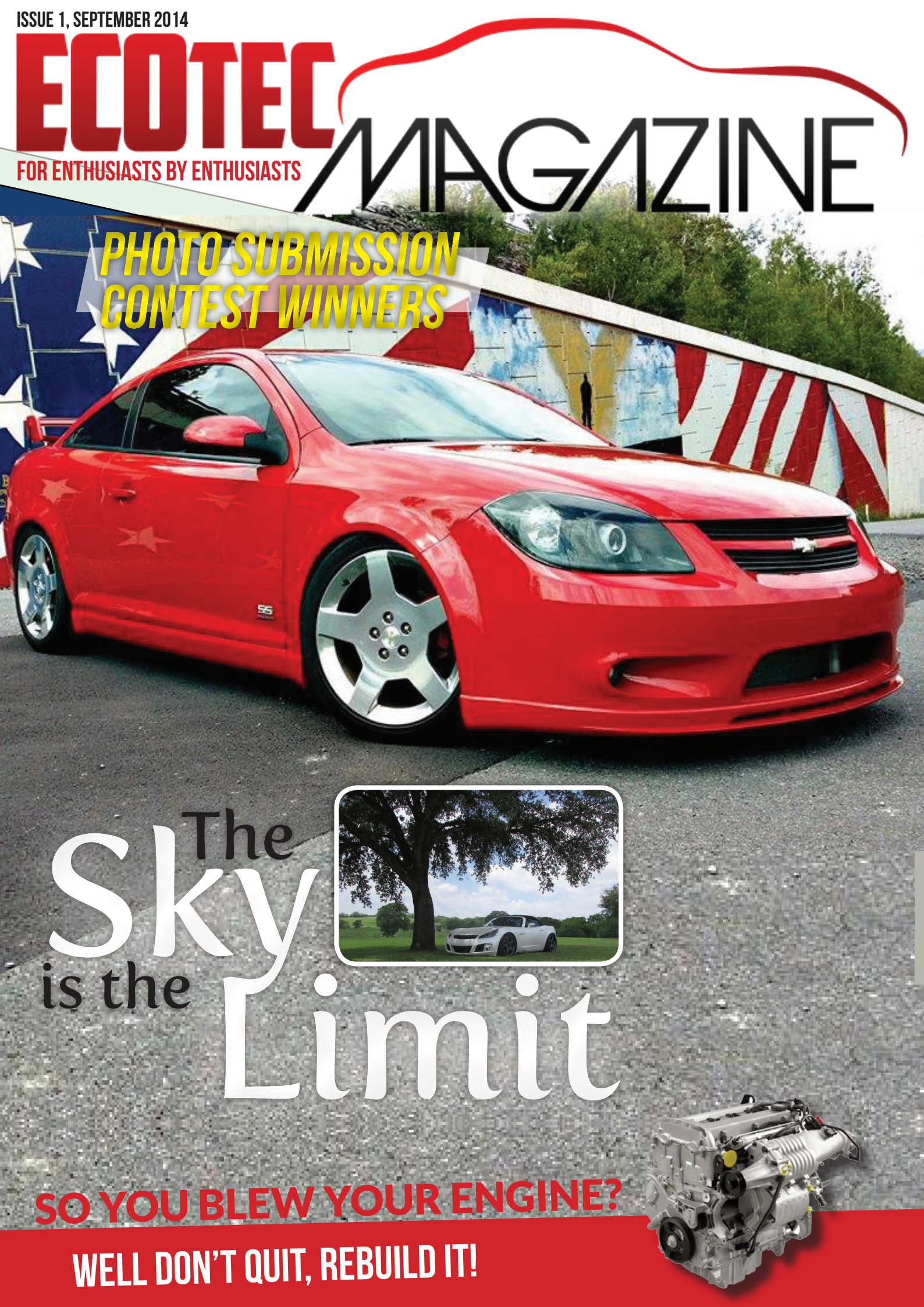
ISSUE 1, SEPTEMBER 2014

# ECOTEC MAGAZINE

FOR ENTHUSIASTS BY ENTHUSIASTS



## PHOTO SUBMISSION CONTEST WINNERS



## The Sky is the Limit



## SO YOU BLEW YOUR ENGINE?

## WELL DON'T QUIT, REBUILD IT!

# Welcome To ECO TEC Magazine

## Letter from the publisher

If you are reading this, this is the day that so many Ecotec owners and especially those that have contributed to the magazine have looked forward to.

I invite you to read and enjoy the first issue of Ecotec magazine.

It's been quite a journey getting the first issue out. I want to thank everyone who has showed their support along the way. All of the Ecotec owners who have shown interested, shared photos, and invited friends to join us on the journey.

I also want to give a separate thank you to the Ecotec Magazine staff members. We had a lot of people show interest in contributing, but I am confident out of those we have a great team to make this magazine everything we and the Ecotec community hope it will become.

For this issue, we're going to begin with a piece Mark called that he titled "The Sky is the Limit". There will also be features on headlight setups, product reviews, and we'll also be featuring the winners of the Facebook competition.

Once again, I wanted to thank everyone for their support and I look forward to seeing this magazine grow and hope that you enjoy reading it as much as we've enjoyed creating it.

**Ben-Climer**
**Publisher**

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# LETTER FROM THE EDITOR

First and foremost, let me say "THANK YOU!" to all who have committed and contributed to this magazine! The support given by the consumers/readers gives us the confidence, courage, and most of all, excitement to make this magazine for you to enjoy!

Thank you to my fellow staff members for being so willing and excited to be a part of something I know will grow into something huge as the Ecotec is still being used, improved and added into new vehicles to this very day!

The consumers and the staff are my inspiration, and make me feel privileged and honored to be a part of this magazine every day!

This magazine was created with the thought of having a way for us to help connect to all branches of the Ecotec spectrum. As many cars in the GM market today have offered an Ecotec engine in it, it seemed this is a good way to help not only branch out, but bring together things for other readers, and branches to have knowledge in.

The Ecotec engines themselves have very slight differences between models, some members of some communities may have their ways of improving something, whereas others may have another way, and this is a nice way for us to help share this knowledge with everyone!

Although this is the first issue, there are still great things in this issue! However, there is much more to come in later issues, and I hope this excites you as much as it excites me!

This magazine will be full of articles to read, personal and technical! It will have reviews, products, schedules and much more! There will be a lot of consumer end interaction such as contests, questionnaire's, prizes and much more!

If this issue seems a little vague, please do not be discouraged, we have only just begun!

Please enjoy this magazine and continue to show your support for it, and we will continue to bring the best we can for you!

Thank you again for everything everyone has done for this magazine to this day! Hope you enjoy!

~LEVI

# MEET THE STAFF

## Name: Ben

E-mail: ben@ecotecmag.com

| Cars Owned |
| --- |
| 1996 Chevrolet Camaro project car |
| 1993 Saturn SC2(Totaled) |
| 2007 Chevrolet Cobalt LS (Totaled) |
| 2009 Chevrolet Cobalt 2LT Team Canada Edition |

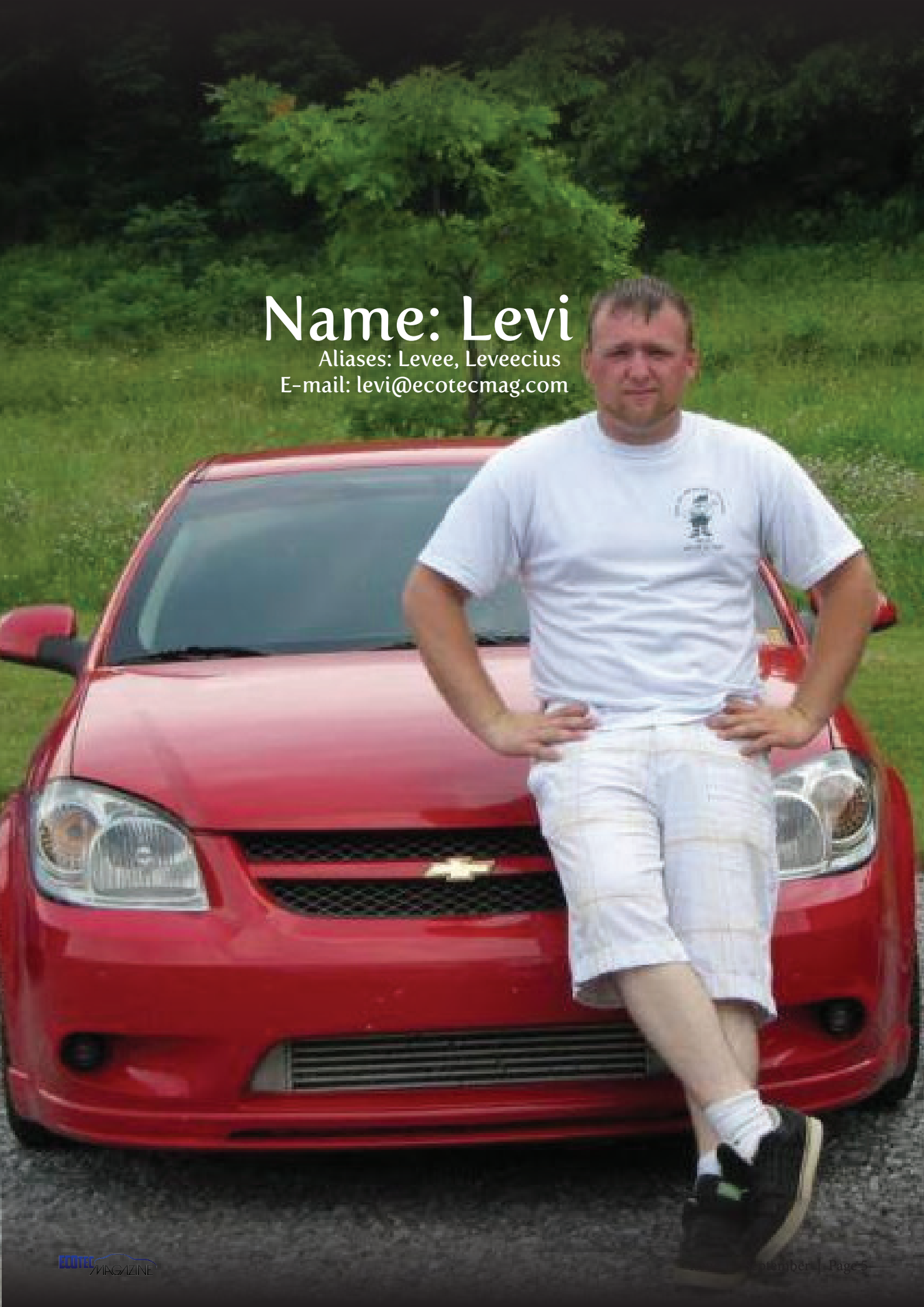
## BIO

"I'm Ben if you couldn't already tell. I'm 20 years old, I've lived in the Nashville area my whole life. Currently, I'm a full time Computer Technician at an IT firm in Nashville. I've always loved to work and be around cars. My mom's side of the family is mostly mechanics; at one point they had a stock car racing team. The first car I bought in high school was a 1996 Camaro with a blown head gasket, it was my project car that I ran out of funds/time on. Since I couldn't restore that car at the time I pulled a 1993 Saturn SC2 from a junkyard and got it running for my first car and I've had a soft spot for 4 cylinder GMs ever since. My first Ecotec was a 2007 Cobalt LS. At the time I was looking for something that could get some decent mileage, was 'American Made", and could at least outrun the soccer moms in the area. I knew I wanted a stick shift, so it took me a long time to find it. It had a rebuilt title, but it drove fairly well and got me from point A to point B with just the basics (No ABS, traction control, power windows or locks, etc.). When I first drove that car home it had 30,000 miles on it, when it was totaled it was close to 100,000. It never left me stranded and because of that car I still love the Ecotec platform today."

## JOB:

"I am the Publisher for Ecotec Magazine. I wear quite a few hats currently. I work with Levi to ensure the quality of the magazine is everything we want it to be. I work with vendors to ensure that anything you buy from us is a quality product. Additionally, I make sure everyone contributing is taken care of and has everything they need to write the best articles they can."

"In close, I'm hoping to work with the great people who are contributing to the magazine to give back to the Ecotec community with Ecotec Magazine!"



# Name: Levi

Aliases: Levee, Leveecius

E-mail: levi@ecotecmag.com

| Cars Owned |
| --- |
| 94 Cavalier 2.2 VL Coupe |
| 89 Cavalier Z24 2.8 |
| 93 Cavalier Z24 3.1 |
| 96 Beretta Z26 |
| 91 Talon TSi |
| 90 Talon TSi |
| 93 Talon TSi |
| 93 Cavalier RS 2.2 |
| 09 Cobalt SS |
| 94 Talon TSi |
| 06 Evo |
| 95 Dodge Ram 2500 diesel |

# BIO:

"Well, where to start. I've been on the forums since 2003. I started on a cavalier forum (v6z24.com), was very active on that forum. I bounced through 4 Cavaliers before getting my Cobalt SS Turbo in February of 2009.

After getting my Balt in February, I deployed to Iraq/Afghanistan in May. Upon my return back to the states, all my modifications came into place. I had several mods done to the car and pushed 538whp out of her before a rod gave out. (Yes, this happened just after ZZP had noticed rods give out in LNF's around 450whp.) Long story short, I had the car stolen and wasn't able to get another one, so I moved on to my current car/truck.

I am an admin of a few forums, and have done magazine work for a magazine whose focal point was Cobalts. I'm a Semi Mechanic by day and a Machinist (engine) by night building race engines on my spare time.

I am a master ASE certified Technician for Cars, and currently working on my Diesel Master Cert. I have worked and owned a performance shop.

I've been around cars my whole life and will continue to be around them til my last breath."

# JOB:

"I am the Senior Editor/Project Manager for Ecotec Magazine. I review articles as well as come up with ideas for next articles, and plan when each article will be put in the magazine. I'm also the right hand man when it comes to feedback/issues, and other various staff issues that may come about."

"In close, I'm hoping to help put this magazine together for your everlasting pure enjoyment. I'm excited over this project and can't wait to see the release. Any questions or concerns, please feel free to contact me. Look forward to hearing from you all."

# Name: Mark Solomon

E-mail: Mark@EcotecMag.com

| Projects |
| --- |
| 2007 Saturn Sky Redline |
| 2013 Triumph Street Triple |
| 2002 Suzuki SV650 (Track bike) |

## BIO

"I am 23 years old coming from Harrisonburg, VA that currently resides in Houston, TX. Currently, I am a full time Porsche Service Technician at one of the most productive, privately owned dealerships in the country. Although I am an ASE, CHIEF Dupont and 3M certified collision repair technician, I chose to chase my dream and continue to turn wrenches in the air conditioned shop of Porsche of North Houston after completing Universal technical Institutes' CRRT program."

"My love for cars came long before I was old enough to even drive. I consider myself to be a true gear head, enjoying cars, trucks and bikes from all ends of the spectrum. I have been riding motorcycles since I was three years old, and raced competitively on and off throughout the years in both motocross and hare scrambles."

"Once I turned sixteen, cars became my main source of interest. I started my journey modifying Volkswagens. I know, terrible decision. I have had a '98 Jetta turbo diesel, '95 GTI VR6, '04 GTI VR6, and '91 Jetta that was rebuilt from the ground up powered by a 12v VR6. As much fun as we had tearing up the mountain passes, nothing I have owned yet has brought as much experience, enjoyment, thrill or passion as my current car. And that, is why I am here."

**What was your first Ecotec?**

"My true love and appreciation for the ecotec platforms started in early 2012. As my Jetta was constantly breaking, I began my search for a more suitable daily. My friend at the time had a supercharged Cobalt, and as hard as I considered it, I knew I wanted a rear wheel drive car. The hunt was on. I searched for 350z's, S2000′ s, turbo genesis coupes, but for some reason I wasn't feeling any of those cars as I looked. And as fate would have it, a base model automatic Solstice came onto our lot. I checked it out, the price was right. I decided to do my research, sleep on it and get back with my salesman in the morning.

The next day at work, something very unexpected happened. My

coworker drove a beautiful, immaculate black Saturn Sky into his bay for a used car inspection. This car was a perfect, one owner, garage kept car with under seven thousand miles on it.

Within 45 minutes, I was handed the keys to my new car, and was even let off work an hour early to drop the top and drive. Two and a half years, too much money and too few parts later, my car has turned into my life. "

**What are you looking forward to?**

"I am looking forward to contributing time, effort, and passion into this magazine in order to see it grow, and give back to the community the feeds it. I hope everyone enjoys this as much as we do!"

"MY LOVE FOR CARS CAME LONG BEFORE I WAS OLD ENOUGH TO EVEN DRIVE. I CONSIDER MYSELF TO BE A TRUE GEAR HEAD, ENJOYING CARS, TRUCKS AND BIKES FROM ALL ENDS OF THE SPECTRUM. I HAVE BEEN RIDING MOTORCYCLES SINCE I WAS THREE YEARS OLD, AND RACED COMPETITIVELY ON AND OFF THROUGHOUT THE YEARS IN BOTH MOTOCROSS AND HARE SCRAMBLES"

# SO YOU BLEW YOUR ENGINE? WELL DON'T QUIT, REBUILD IT!

**BY MARC HILL** - GUEST WRITER

Now that things have been around for awhile, we have a few block options LSJ, LHU, LDK, and LNF are all viable options. If you have a LSJ, things will be a little more difficult for you but definitely NOT impossible. I personally (after dealing with poor machine shops) decided to go with LDK/ LHU (oem e85 version) & LSJ Hybrid. My main reasoning for going with the LDK block

was because of the increased strength and the lack of a need to brace the sleeves of the engine internally for my power goals; that and I got a really good deal, as of right now it has all stock internals. I will push the block to failure then start again with beefed up internals, I expect the pistons to be the first to go. It should handle in stock form up to 500whp (in Delta or Kappa platform vehicles) in heavier vehicles (3,100lbs+) I would subtract 100hp for every extra 1,000lbs over 3100lbs to be safe. As the only failure I know of now being in a Buick Regal making 450whp on n2o for 20kmiles those cars are @3,700lbs.

If you are starting with a LSJ, you will need to modify some things to make it work in your application. The LSJ crank trigger wheel will need to be fitted to the crank of an LDK, You can reuse the Direct Injection pistons as well, they will drop compression from 9.5 to 9.3, you should not have any clearance issues either, if you are use upgrading pistons use NON Direct injection pistons as they flame pattern will be better with a LSJ head.

In a LNF equipped vehicle these blocks are pretty much a direct swap. You will be able to reuse everything the biggest hurdle would be the oil cooler/ oil warmer, some LDK/LHU blocks will not have this and especially hard to come by, and new units are very expensive. You will need to reuse your oil pans in most situations because of fitment issues. If you are looking to upgrade the internals for even better power handling you can use most items of the LNF, be sure to check with the manufactures and triple measure everything.

# LET'S GO THROUGH THE GENERATIONS..

## GEN 1 OF THE PERFORMANCE ECOTEC'S THE LSJ

### GENERAL SPECS

Eaton M62 Supercharger
Piston cooling jets
Oil cooler
Sodium-filled exhaust valves a
Rated at 205 hp & 200 lb/lfs
Compression ratio of 9.5:1
Forged steel crankshaft

### DOWN FALLS INCLUDE

Open Deck Design
Stock Sleeves prone to cracking
Custom Sleeves for high horsepower
Requires Sleeve bracing for high horsepower

**THE LSJ IS A ESSENTIALLY A SUPERCHARGED VERSION OF THE LK9 ECOTEC 2.0 L**

# GEN II OF THE PERFORMANCE ECOTEC'S THE LNF

## THE LNF IS A ESSENTIALLY A UPDATED TURBOCHARGER VERSION OF THE LSJ ECOTEC 2.0 L

## GENERAL SPECS

- Twin-scroll turbocharger
- Direct injection fuel system
- Continuously variable valve timing
- Sodium-filled Inconel exhaust valves
- Cast aluminum pistons
- Piston cooling jets
- Forged steel crankshaft
- Forged steel connecting rods

## DOWN FALLS INCLUDE

- Thicker Sleeves
- Open Deck Design
- Stock Sleeves prone to cracking
- Custom Sleeves for high horsepower
- Requires Sleeve bracing for high horsepower
- Porous /internally cracked Blocks allows Coolant/ oil Loss

# GEN III OF THE PERFORMANCE ECOTEC'S THE LNF

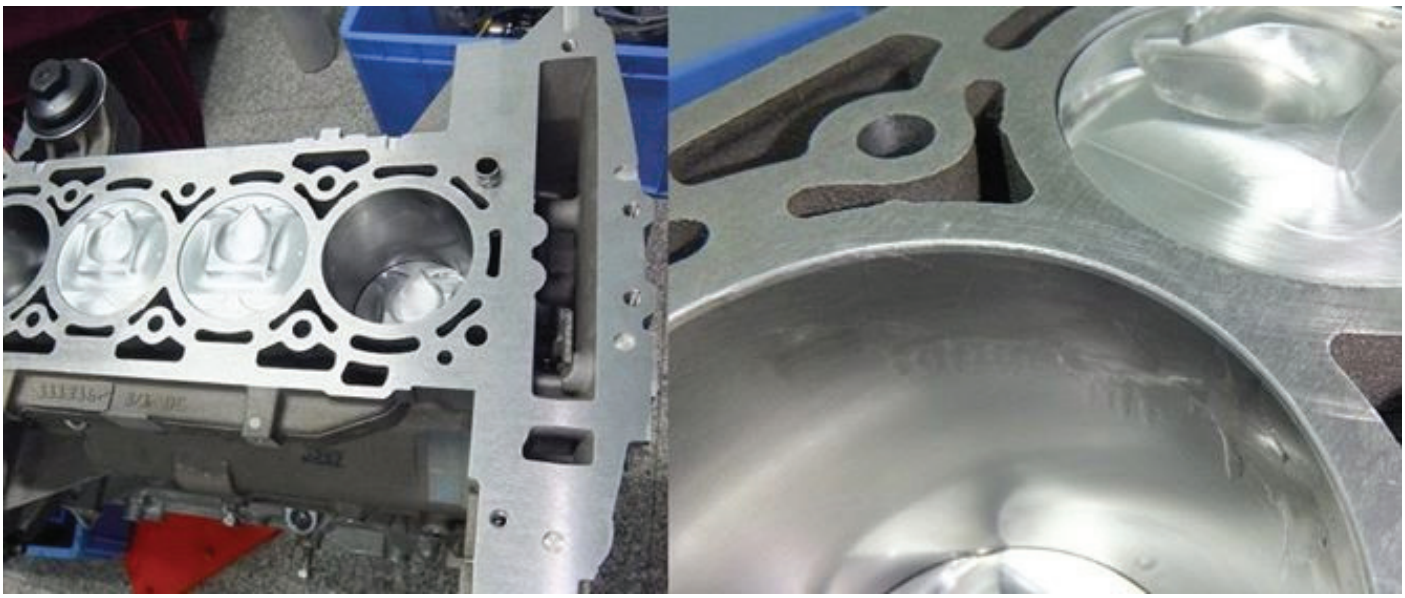
## THE LNF IS A ESSENTIALLY A UPDATED TURBOCHARGER VERSION OF THE LSJ ECOTEC 2.0 L

### GENERAL SPECS

- Twin-scroll turbocharger
- Direct injection fuel system
- Continuously variable valve timing
- Sodium-filled Inconel exhaust valves
- Cast aluminum pistons
- Piston cooling jets
- Forged steel crankshaft
- Forged steel connecting rods
- Closed deck design
- Structurally stronger block
- High factory output and power handling

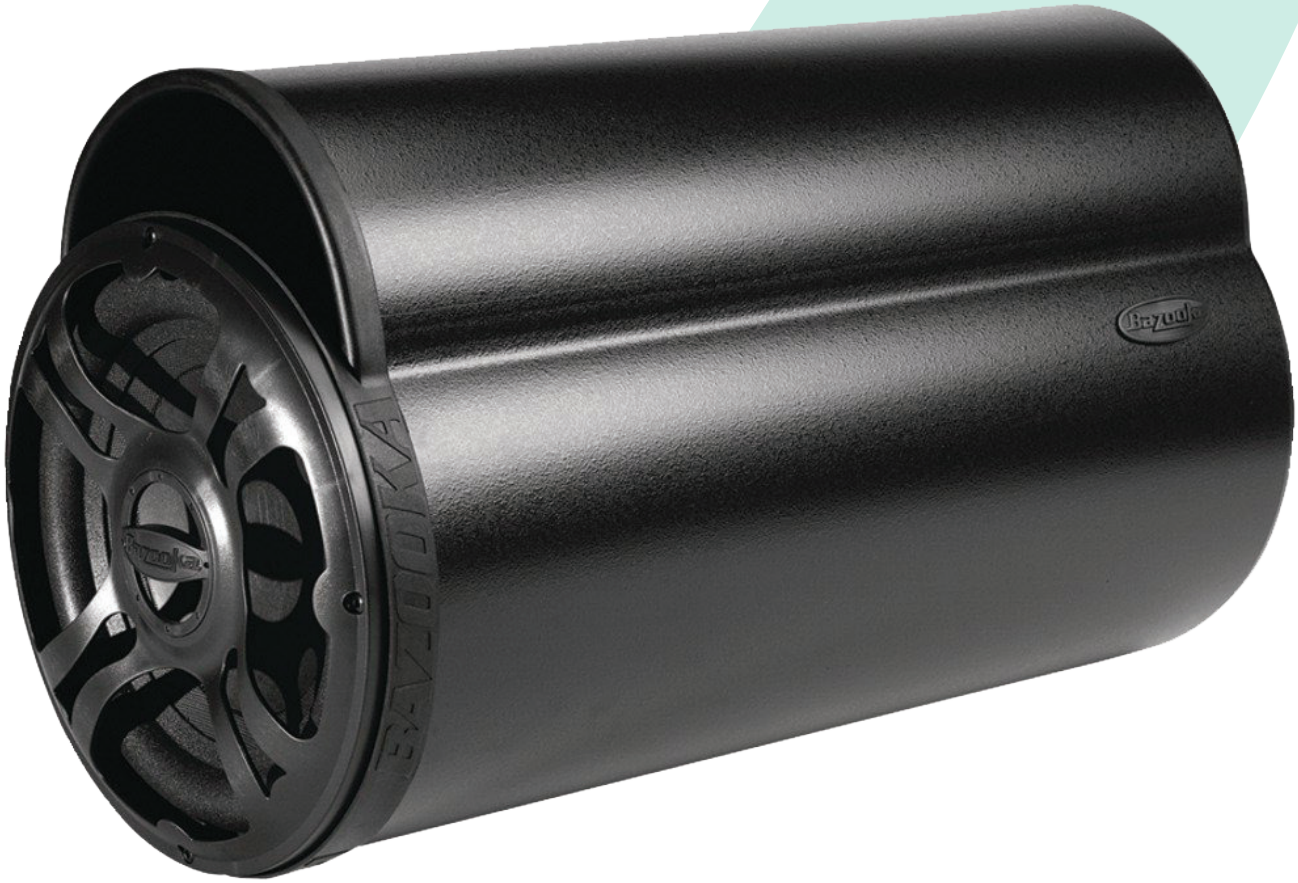
### DOWN FALLS INCLUDE

- Cost
- Availability



"You can consider the LDK a cumulative update that has fixed most of the problems and issues associated with the LSJ and LNF. This block will be the winning combination when prices come down and it is more widely accepted. Many are now pushing the limits of this engine in stock and modified forms, things can only get better from this point on forward. I expect even higher power handling in the future from GM, and more power from the aftermarket." –Marc Hill

# PRODUCT REVIEW




## BAZOOKA BTA10250D 10 INCH SUBWOOFER

## INTRODUCTION

Most anyone who commutes with their car on a daily basis or takes long drives knows that A good quality audio system can make a huge difference in the quality of your trips.

Whether you're rocking out to Five Finger Death Punch, listening to Carrie Underwood, or blasting Eminem, having a good subwoofer can make a huge difference in the sound quality.

The challenge is for most Ecotec owners, trunk space can be limited.

Installing large subwoofers may not be an option because of the trunk size, then you consider installing a low-profile subwoofer, but it just doesn't give you the bass you need.

The answer to your problems just might be the **Bazooka BTA10250D**

# WHAT AMAZON USERS SAID

4 of 4 people found the following review helpful

★★★★★ **Worth the price and very compact**

By mikey on January 4, 2011

Edition: 100 Watts, No Installation Kit | **Verified Purchase**

It easily fits in the corner of your car trunk and adds vivid bass to your present stereo system. It was well worth the money

6 of 8 people found the following review helpful

★★★★☆ **A nice little punch!**

By J. Sanderson on January 12, 2009

Edition: 100 Watts, No Installation Kit

Have it in my full size sedan. Adds a nice little punch of bass. Makes the music seem fuller with this since my factory subs went out. You can get this same thing for half the price [...].

7 of 7 people found the following review helpful

★★★★★ **bass tube**

By drew on September 11, 2010

Edition: 250 Watts, No Installation Kit | **Verified Purchase**

had this for a couple of years now and i abuse it on a daily basis.
not once had an issue yet. i would advise getting the remote control for it though.

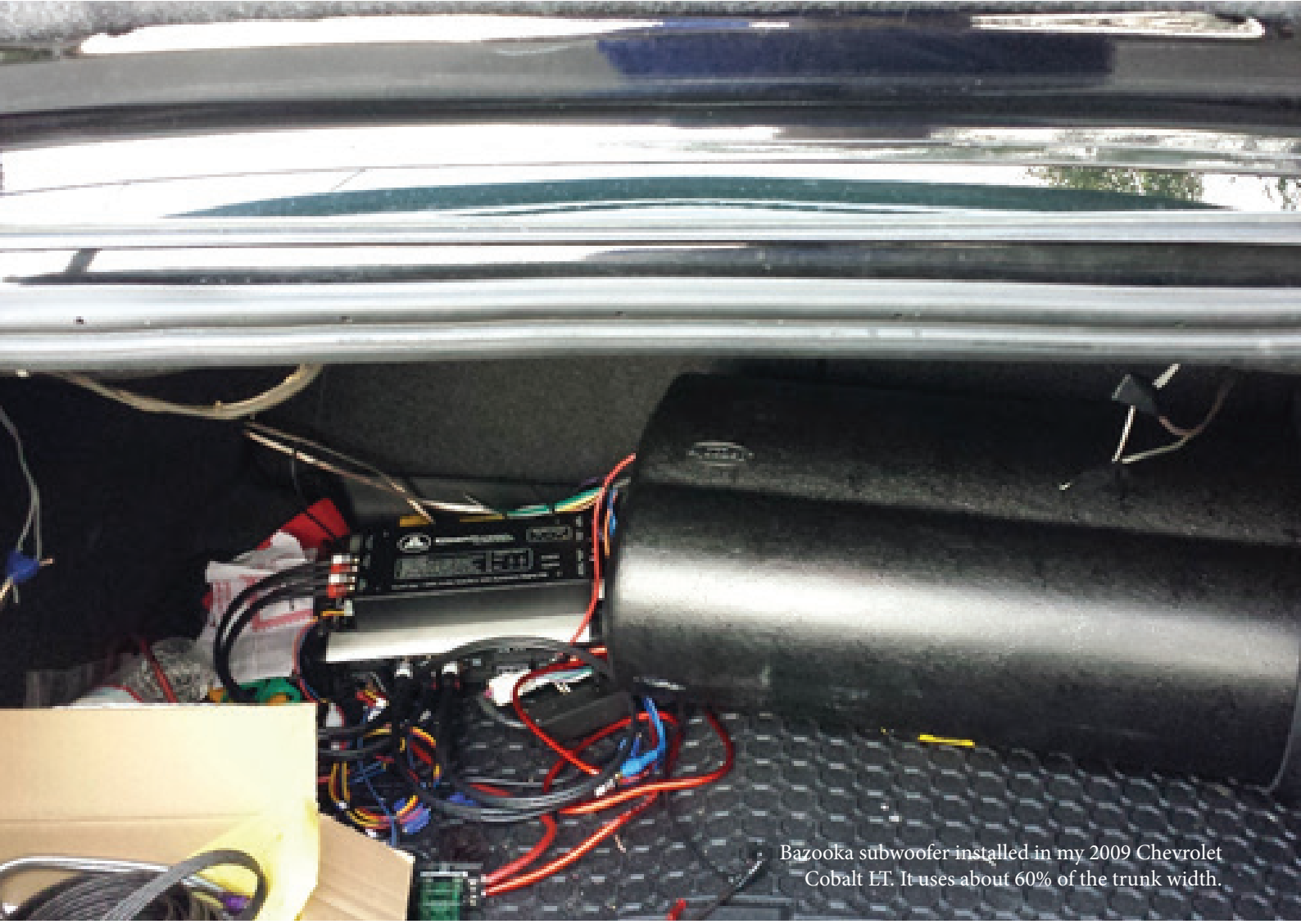
| TECH SPECS |
| --- |
| Woofer size: 10 inches |
| Woofer Material: Poly |
| Enclosure Type: Ported |
| Height: 13” |
| Width: 10” |
| Parts & Labor Warranty: 1 year |
| Frequency Response: 30-250Hz |
| Power(RMS): 200 watts |
| Maximum Wattage: 250 watts |
| Impedence: 4 ohms |
| Crossover Point: 60-250Hz |
| Sensitivity: 100 dB |

## PROS

- A lot of bass delivered in a small package
- Install is very easy (The subwoofer comes with most of the needed wiring)
- Because it’s a class D amplifier, it’s very inefficient(Which means no headlight dimming for those with smaller alternators)
- Easy to remove if you need the trunk space

## CONS

- Some users have reported their subwoofer arrived damaged, from the cases I’ve seen this has been due to package or postal companies mishandling the packages – Be sure to order from a vendor that has a good return policy incase this occurs.



Bazooka subwoofer installed in my 2009 Chevrolet Cobalt LT. It uses about 60% of the trunk width.

# WHAT TO EXPECT

**Installation:**
My installation is not quite finished yet, I ended up buying a distribution block so that I could hook up the Bazooka subwoofer and my JBL equipment to one wire.

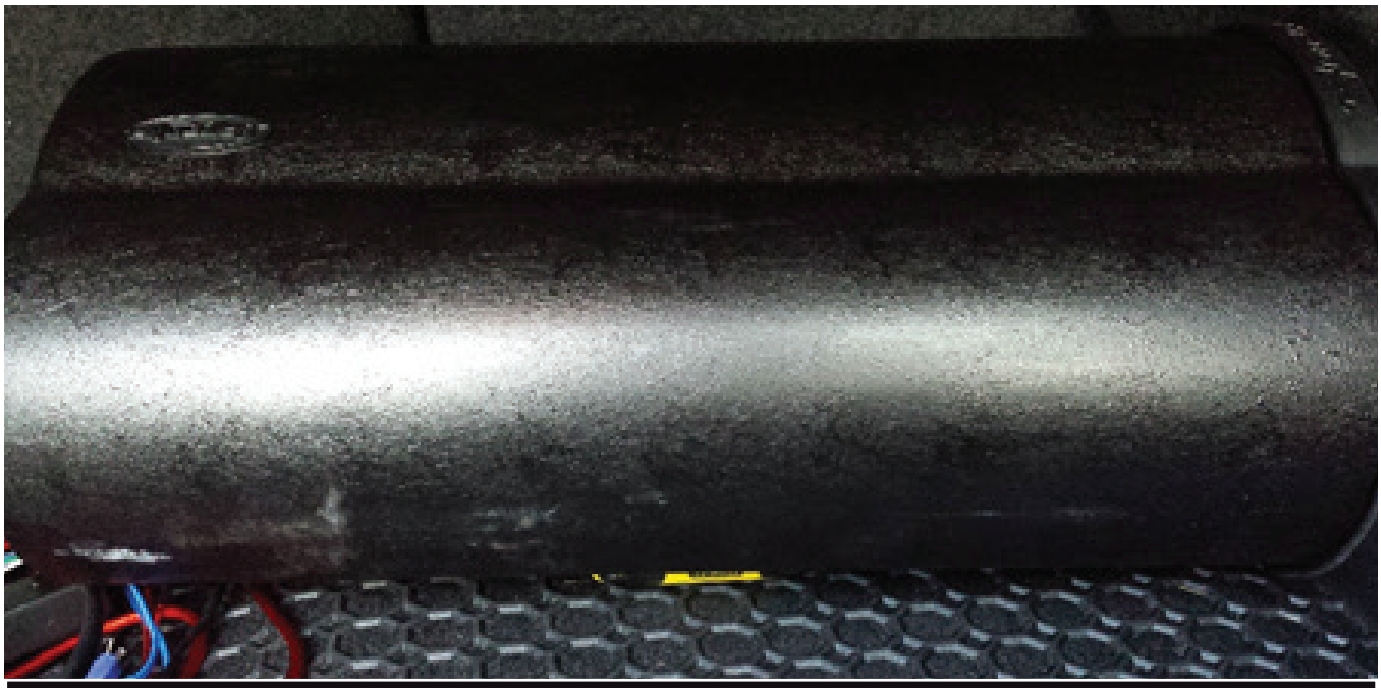
It also let me fuse both which is nice because if you want to remove/re-wire one but not the other you can remove the fuse and take away its power.

The Subwoofer comes with a harness that is very easy to connect to (The appreciate wires come pre-stripped) – Check your user manual and it will give you the color codes. For my install, I hooked up the power positive and negative, remote, and 2 RCA cables from the pre-amp on my JBL amplifier.

**How loud is it?**
Using the sound meter app on my android phone, I turned the subwoofer volume to about 75% and began turning up the music. My coaxial and component speakers are amplified, so I turned them off and played music with just the subwoofer outputting sounds and here are the results:

Overall it averaged about 90dB, it's not going to drown out your screaming child or make your ears bleed, but it will add good quality bass to your music.

Sound Meter
MENU
89 dB
Smart Tools
180dB : Space shuttle lift-off
130dB : Jet engine at 100 ft.
120dB : Threshold of pain, Thunder
110dB : Rock music, Screaming child
100dB : Subway train, Blow dryer
90dB : Factory machinery at 3 ft.
80dB : Busy street, Alarm clock
70dB : Busy traffic, Phone ringtone
60dB : Normal conversation at 3 ft.
50dB : Quiet office, Quiet street
40dB : Quiet residential area, Park
30dB : Quiet whisper at 3 ft, Library
20dB : Rustling leaves, Ticking watch
Find Friends & Fight Foes



**TIP** ▶ ***When choosing a Bazooka subwoofer, check the model. Amplified models will start with BTA while passive models while start with BT typically.***

## PRICING

Here is the pricing for the subwoofer mentioned,
(not sure if this is needed since you said "Pricing") they also have a 100watts model that typically runs about $50 cheaper.

**Amazon - $247.83 (with free prime shipping)**
**Walmart Online - $247.83**
**Sonic Electronix - $269.99**
**Crutchfield – Discontinued.**

***Note:***
*Ecotec Magazine publishes these prices strictly for informational purposes and not as a recommendation. – Please do your research on the vendor you are doing business with.*

## CONCLUSIONS

The Bazooka BTA1025D is a great powered subwoofer for those that enjoy a lot of bass, but still need the trunk space on occasion. If you find that it doesn't have enough bass for you, you can pair it with a passive bazooka subwoofer for even more bass.

## RECOMMENDED ACCESSORIES:

RCA wires(I got mine from monoprice.com for $2-3 per cable)
Power Distribution(I picked one up from Wal-mart for about $10 before tax)
Amplifier installation kit? (Since I bought shorter RCA cables from Monoprice, the only thing I used from the amplifier installation kit I bought was the power cables.)

# ScanTool OBDLink MX Bluetooth

## Introduction

Picture this – You're driving your car down the road. Maybe you're listening to some music or wondering when the person in front of you is going to turn off their blinker (It's been on for 3 miles and you've been trying to get their attention and they just ignore you…what is wrong with them…)

Then out of nowhere the dreaded CEL or check engine light comes up on your gauge cluster…

One of two initial thoughts will cross your mind:

1: Meh, I drive an Ecotec, it was going to happen sooner or later.

2: What the heck…why do I have a CEL? Is my MAF sensor dirty? Did I forgot something when I installed my intake? Maybe I shouldn't have tried to cook leftover pizza on my engine even if it was clean enough to eat off of…

Regardless of which initial thought you have, you're most likely curious as to why you have the check engine light.

There are a lot of scanner options out there, starting from the low end from a handled scanner you pick up for $15 at AutoZone that really doesn't give you much info to a GM tech2 or snap on scanner that could easily cost thousands(given the tech2 will also let you program your car.)

Luckily there are some options in between. I have owned a usb scanner in the past (those of you familiar with them will recognize the elm127 type) The challenge with those is I don't always have my laptop with me and a lot of times the programs that use the tool can be unstable or costly.

So I went on a search and asked other Ecotec owners…when Coby7 on yourcobalt.com made the recommendation of a Bluetooth scanner…the search was on…

# Disclaimer

After a lot of hours reading reviews and comparing features and specifications I ended up going with the ScanTool OBDLink MX Bluetooth.

Keep in mind this is only going to work with Android or Windows phones (ScanTool also has a Wi-Fi model for iPhone users.). My review is going to be based on the Bluetooth model, I can't speak to the Wi-Fi model personally, but I have heard good things.

# Features

| |
|---|
| Uses Bluetooth v3.0 Interface |
| Features "Battery Saver" sleep mode – this allows you to keep it plugged in without it running down your battery. |
| Compatible with Windows and Android devices. |
| Supports all OBD-II protocols |
| Fast response time |
| Scan Tool has released a free application that works with the device if you aren't ready to buy Torque Pro, though you may also use it with the free version of Torque. |

# What Amazon users said

76 of 80 people found the following review helpful

★★★★★ **Awesome Product, Awesome Customer Service**

By Steven J. Kile on March 30, 2013

**Verified Purchase**

I bought this scan tool based solely off of a response of the owner of the company to an individual that wrote what I perceived to be a bogus review. After reading the owners response, I could feel his passion for his product and his dedication to providing the highest quality product he could make. That being said I bought this from Amazon and it arrived two days later.
I wanted to use this scan tool with my Acer A500 Android Tablet. In the meantime before it arrived I went to the google store and bought Torque Pro, Dash Command, and OBD Link, the factory software. I loaded all of the software onto the tablet and before I had received the OBD Link MX. I noticed right off a problem with an intermittent wifi connection but couldn't quite figure out what was wrong with the wifi. In the meantime the scan tool arrived and I set about pairing it via bluetooth with my tablet. I also noticed that Amazon had shipped the package in an envelope that crushed the package. it was also missing the CD from the package. I plugged the OBD Link MX into my 1998 K2500 Suburban and immediately the data was not coming through to the Acer A500. It was late at night, I was tired, so I quit fooling around with it. I did though, shoot off a very short, terse, email to the OBD Link customer service, thinking I would get a response a week later if that. I was prepared to send it back to Amazon, but, by the time I was ready to crawl into bed, lo and behold there was an email reply from the OBD Link Customer Service and I thought to myself, WOW, I have never had an email response so quick. I read it and it took me a couple of days before I could try out the suggestions. It took three more email exchanges over a week to finally resolve the issue. The slowness of figuring out the problem was on my end. Read more ›

31 of 33 people found the following review helpful

★★★★★ **One of the pricier ones, but worth every penny! Auto-shutoff alone is worth the price.**

By BeachBunny on November 5, 2013

**Verified Purchase**

There's plenty of OBD to Bluetooth adapters out there. You can pick up the cheapies for $20-30. So how does ScanTool get away with charging 5x as much for this one? Quality and support.

If you're looking for a quick one-off to clear the Check Engine light before dragging your jalopy in for the state vehicle inspections, this isn't the device for you. Go ahead and read the reviews on the cheapie adapters. Pay attention to how long people have had them. You'll find the cheap adapters have major manufacturing quality issues, so short lifespans and incompatibilities are the norm.

However, if you're wanting to keep tabs on your car and want accurate data, this IS the device for you. For about the same price as your dealer will charge to run a diagnostic on your car, you can get this little gadget which can do the same thing.

This adapter has the fastest response times and supports the largest amount of data out of any of the OBD/Bluetooth adapters. If you're using a program like Torque, you'll want the extra data capacity/speed, as each gauge you add to Torque uses more bandwidth.

My favorite feature by far is the auto shutoff, and this adapter is the only one I'm aware of which has it. I leave it plugged in 24/7 in my car and it automatically shuts off after I turn off the car and comes right back on when I start the engine. It pairs nicely with my Motorola Droid Maxx, every time.

I did also see some reviews that said they had compatibility issues with Torque and DashCommand, however, I have not encountered those issues personally, but keep that in mind if you purchase.

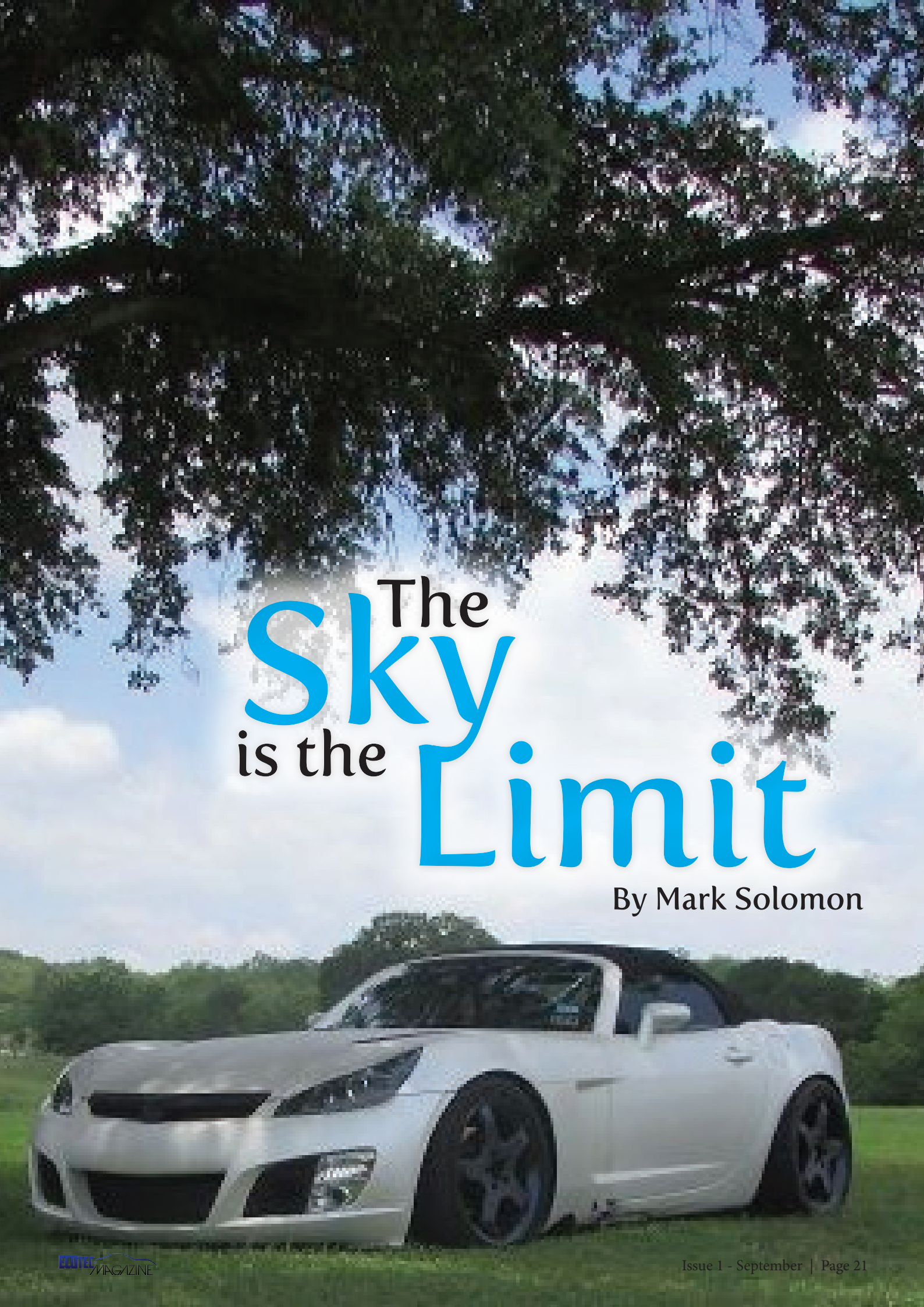
| PROS | CONS | TIPS |
|---|---|---|
| Size<br>Response Rate<br>Customer service | It's not likely that this is going to reset ABS or SRS lights. – I haven't encountered those on my vehicle so I am unable to test that functionality at this time. | Start with the free app that comes with the device and then if it doesn't fit all your needs you can check out my next article that goes over the different applications and does a comparison. |

# Conclusions

While There are cheaper alternatives out there, I felt this device best met my needs, compared to more expensive scanners I feel it's a good "bang for the buck". As always there are cheaper alternatives that I did not go into, but you are welcome to research and see if they fit your needs.

Bluetooth™

In the next article I'll be reviewing the best apps to use with this device.



# The Sky is the Limit

By Mark Solomon

Your average human being typically associates the word Saturn with one of two things, a planet that shares our sun or an economical, relatively cheap daily driver. Now, as much as I would love to give our readers a college level astronomy presentation that is obviously not what I am going to do. Instead, today's presentation will be taking place in Houston, TX, home of some of the fastest and most tastefully built cars in the United States.

Now before we get too deep into this love story, which I can assure you is much more entertaining than any fictional vampire fairy tale, let's back track to 2007 when Saturn took an unexpected turn in the automotive industry. They had already started a trend with plastic panels that were next to impossible to dent, introducing state of the art frame technology and also doing research and development for NASA. It

seemed as though they were only missing one thing, a flagship sports car.

One model year after the release of the Pontiac Solstice, General Motors released a second Kappa platform with the Saturn Sky. The sky utilized both the 2.4L engine in the base model and the 2.0L turbo in the Redline, just as its sister car. Its lines were sharper than the Solstice, as well as the interior being modestly different with a slew of color options, but the philosophy behind the car stayed the same. This was a purist car, assembled solely to entertain the driver and his choice of passenger. It was to be a car for the daily commute, but very capable at the track on the weekends. It was a car to change the way the average person viewed Saturn as a brand.

Back on track, let me introduce you to my own personal vehicle, a 2007 Redline. This car fell into my lap in 2012 when its first owner traded it in at the dealership I work at. It was flawless. The paint and interior were immaculate and it even still had plastic in the door jams and on the head unit. It had very few service records to accompany it though, as it had a whopping 6,982 miles on it.  I had to have it, and by the end of the day the papers were signed and it went home with me.

I had been in the market for a rear wheel drive compact car for quite some time prior to my purchase, and the Sky was near the top of the dreaded "Do Want" list. It had always grabbed my attention with the hard body lines, aggressive stance and impressive power. It is a very unique chassis, and with such few numbers of them made in comparison to other cars, you sadly don't see them enough.

Personally, I don't believe in cars that sit. Cars were meant to be driven and used, and sitting and rotting is arguably worse for any vehicle than a day at the track. Things need to rotate, seals need to stay lubricated. This is why this car has been daily driven since day one.

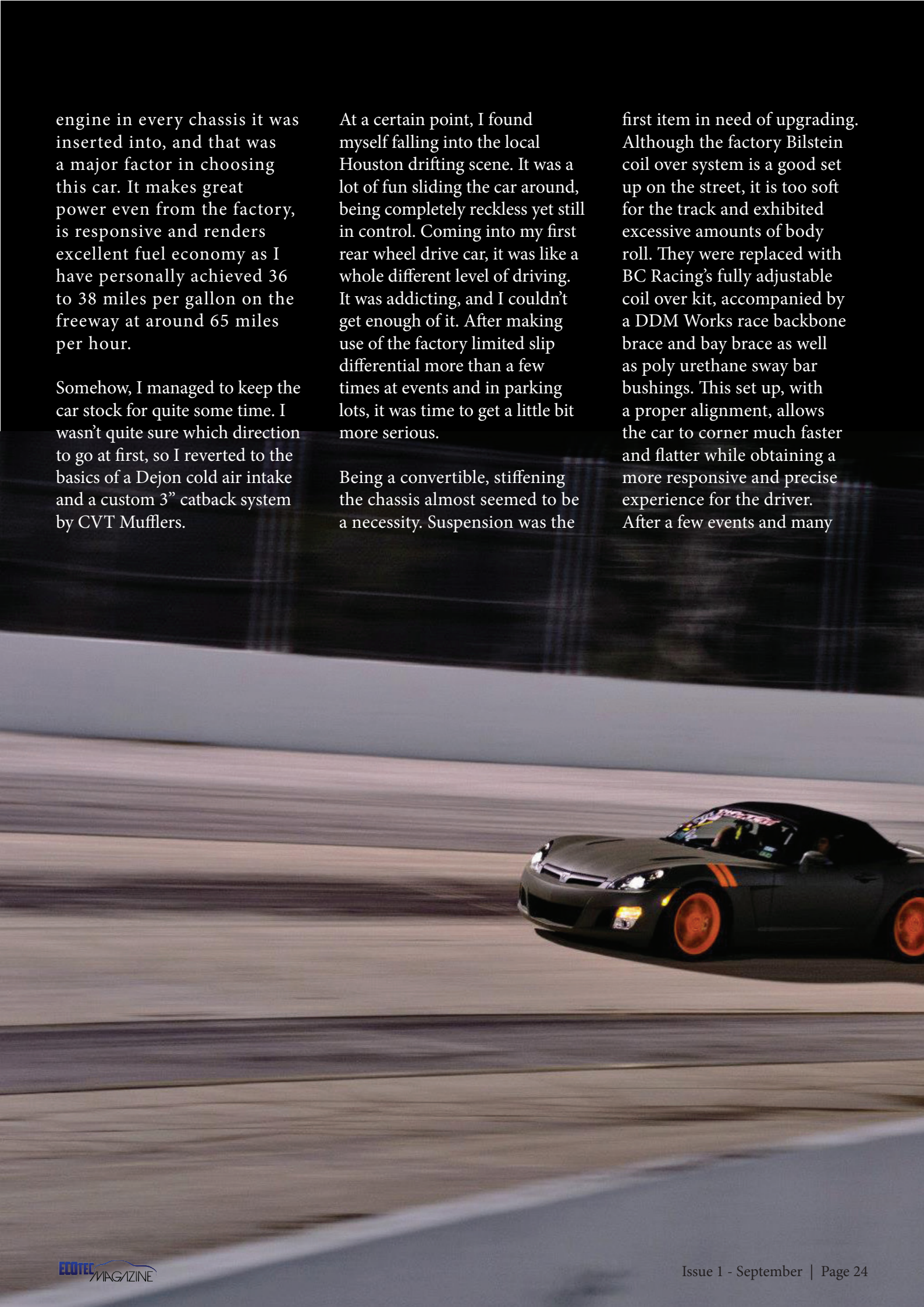
The 2.0 liter LNF has proven itself to be a very reliable

engine in every chassis it was inserted into, and that was a major factor in choosing this car. It makes great power even from the factory, is responsive and renders excellent fuel economy as I have personally achieved 36 to 38 miles per gallon on the freeway at around 65 miles per hour.

Somehow, I managed to keep the car stock for quite some time. I wasn't quite sure which direction to go at first, so I reverted to the basics of a Dejon cold air intake and a custom 3" catback system by CVT Mufflers.

At a certain point, I found myself falling into the local Houston drifting scene. It was a lot of fun sliding the car around, being completely reckless yet still in control. Coming into my first rear wheel drive car, it was like a whole different level of driving. It was addicting, and I couldn't get enough of it. After making use of the factory limited slip differential more than a few times at events and in parking lots, it was time to get a little bit more serious.

Being a convertible, stiffening the chassis almost seemed to be a necessity. Suspension was the first item in need of upgrading. Although the factory Bilstein coil over system is a good set up on the street, it is too soft for the track and exhibited excessive amounts of body roll. They were replaced with BC Racing's fully adjustable coil over kit, accompanied by a DDM Works race backbone brace and bay brace as well as poly urethane sway bar bushings. This set up, with a proper alignment, allows the car to corner much faster and flatter while obtaining a more responsive and precise experience for the driver. After a few events and many



bruised knees later, it was time for seats. Being thrown around all over the stock seats was entirely over rated, so a pair of Bride Lomax seats on custom brackets were installed, using stock sliders and stock seat belts and mounting locations. Also installed was an NRG race wheel with a 2.0 version quick release hub to help with getting in and out of the car. All this was done just before the car was sent over to Silhouette Garage in Houston to have the roll bar installed.

Because of the design of the Kappa frame, it is next to impossible to fabricate a functional roll bar without cutting and hacking specific parts of the vehicle. Most of the time, owners are forced to cut holes into the waterfall panel and trunk lid as well as remove the soft top and run a hard top. For this car, that was not an option. They managed to come up with a double diagonal design that was placed in front of the rear panel, with down bars running from the main hoop to the rear panel. This minimalized the amount of trimming and cutting inside of the cabin and the ability for a functional soft top. The fixed back seats and removable wheel created just enough space for this to still be somewhat comfortable as a daily driver, but ensure safety in the event of a rollover. Also, the chassis was further stiffened, and it is aesthetically appealing as well.

As for aesthetics, the body of the car has been left alone for the most part.

The redline edition Saturn Skys were equipped with a black headlight housing verses the base model chrome, as well as the spoiler. The dual exhaust was turned into a 3" ca[illegible] system, exiting in the [illegible] where the reverse ligh[illegible] o be.

The rear valence was cut away, revealing the rear end and allowing easy access to jacking points when at the track. To keep things entertaining, I started using Plastidip every so often. Having once been a Dip Your Car authorized installer, I was constantly changing things up to attract business and stir up conversations. The car has been everything from white, to flat black, camouflage, purple, even a scheme to mimic a suit and tie. Currently, the black is hidden beneath a coating of flat pearl white resting on light gold 18x8 Mercedes Benz wheels.

Performance wise, the motor has been left virtually stock. As boring as this sometimes may get, the reliability of the LNF has been unsurpassed. Over time and with continued practice, I am learning to make use of the stock 260hp more and more. Plans for any heavy modifications are still undecided, but in the mean time I have enjoyed a car that has yet to spend time on a tow truck.

For now, I am enjoying the car in its current state. In 2015, I'm hoping to get pretty serious with the build and prep it into a full blown time attack/ solo competition car with a full roll cage and hard top. There is possibility of a higher displacement swap, but only time will tell.

The Ecotec life has been a good one for myself, and all the rest of the crew here at Ecotec Magazine. We are working hard to bring you a quality publication that you will enjoy looking through, yet still having a blast doing so. We are really looking forward to lending a helping hand in the community, and establishing a long lasting presence. I hope you enjoy this, and the rest of issue one.

**Mark Solomon**

# Full Mod List

Dejon Intake
CVT 3" catback
BC Coilovers
DDM Backbone Brace
DDM Bay Brace
Energy Suspension poly sway bar bushings
Bride Low Max seats
Brackets by Status Works Auto Garage with factory sliders
NRG Race wheel with 2.0 hub
Roll Bar by Silhouette Garage
DDM Stainless brake lines
Stoptech drilled and slotted rotors and metallic brake pads
Porsche OEM brake fluid
Mercedes Benz wheels 18x8 +48
1" wheel spacers
Tires--always changing
DDM Power Steering Relocation
Fender liner delete
All plastidip schemes by myself

## Shout outs:

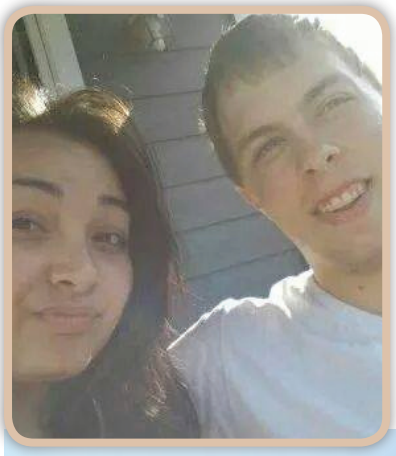
The girlfriend for always dealing with my hobbies, the parents for never disowning me, the crew at Status Works for the countless helping hands and for all the fellow enthusiasts keeping me motivated.

# PHOTO SUBMISSION CONTEST WINNERS

For the first ever Ecotec Magazine contest we kept it simple. We did not expect the number of submissions we got, we received over 200 submissions (Which currently grace the cover of this issue.)

THE CONTEST WAS VERY COMPETITIVE AND THERE WERE A LOT OF GREAT SUBMISSIONS. HOWEVER, THE FOLLOWERS OF OUR FACEBOOK PAGE WERE THE ONES WHO PICKED THE WINNER.

In 3rd place, we had Marissa Locke's Cavalier



In 2nd place, we had Anthony Wibberg's Sonic

In 1st place, we had Amber-Nicole Beckage's Cobalt SS

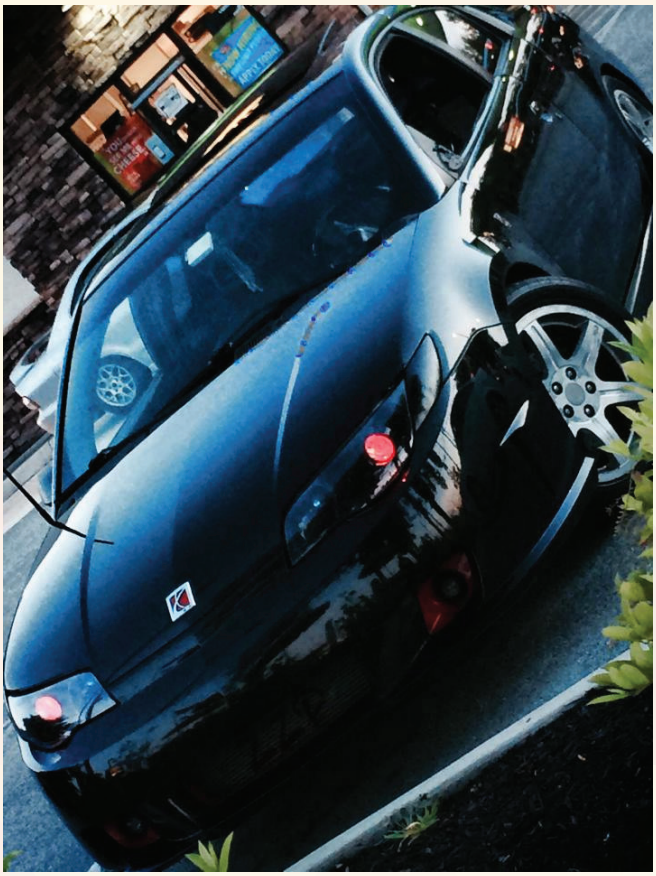
# ABOUT AMBER

"I bought my Cobalt in April of 2013.
As of right now not too much done to her, air box mod, strut bar, Stance Coilovers, Corsa Touring exhaust, custom retrofit headlights, tinted tails, and candy purple powder coated valve cover. Future plans are hub swap so I can find some sexy wheels since the cobalt 5x110 is impossible and as much as i love my supercharger whine i plan to TURBO SWAP asap! Before my cobalt I had a 2003 Mitsubishi Eclipse I grew up working on cars with my dad so I am very excited to start ripping into the car and creating something that I can fall even more madly in love with." – Amber

Thanks to everyone who participated, there were so many great entries.
We look forward to doing more of these contests in the future.

# ASK THE READERS...

In this section we ask readers of their magazine what they would like to see…this month we asked readers what was the best headlight setup they had seen and there were some great replies. Here are just some of the results..



SEND US YOUR EVENTS! NEXT ISSUE WE'LL HAVE AN EVENT CALENDAR, SO BE SURE TO SUBMIT ANY UPCOMING EVENTS SO THAT WE CAN ADD THEM TO THE CALENDAR. SUBMIT YOUR EVENTS TO EVENTS@ECOTECMAG.COM

WE LOVE FEEDBACK! WE LOVE TO GET FEEDBACK FROM OUR READERS. FEEL FREE TO SEND IT TO INFO@ECOTECMAG.COM